Short-chain fatty acids

STELLINGEN

Behorende bij het proefschrijft

SHORT-CHAIN FATTY ACIDS:

THE LINK BETWEEN GUT MICROBIOTA AND METABOLIC HEALTH

1. Distal, but not proximal, colonically administered acetate modulates human whole-body substrate oxidation – *This thesis*

2. Colonic infusions of short-chain fatty acid mixtures markedly increase fasting fat oxidation and resting energy expenditure, which may be related to the increased circulating acetate concentrations. – *This thesis*

3. Acetate inhibits intracellular lipolysis and acts via attenuation of hormone sensitive lipase phosphorylation in a G protein-coupled receptor-dependent manner in human adipocytes. – *This thesis*

4. Modulation of distal colonic acetate production by diet has great potential as a strategy to improve the human metabolic profile - *This thesis*

5. *In vivo* short-chain fatty acid fluxes rather than cecal concentrations correlate in an inverse manner with biomarkers of the metabolic syndrome.– *Den Besten 2014, Plos One, Sept 2014*

6. Diet-induced manipulation of the gut microbiome and related metabolic health effects are determined rather on an individual than on a population level.

7. The asymmetric plasticity between the relatively stable human genome and the more malleable gut microbiome suggests that incompatibilities between the two could rapidly arise. – *Sonnenburg, Cell metabolism 20, April 2014*

8. “Science is simply the word we use to describe a method of organizing our curiosity.” – *Tim Minchin*

9. Um so steiniger der Weg, umso wertvoller das Ziel.

Emanuel E. Canfora, 23 september 2016